

WHAT IS CLAIMED IS:

1. An image forming method for forming an image by supplying a developer from a development unit to a latent  
5 image on a latent image carrying member for image development, the method comprising the steps of:

forming a thin layer of developer on a developer carrying member by generating an electric field in a developer supply zone between the developer carrying member  
10 of the development unit and a developer conveyance member; and

conveying the thin layer of developer formed on the developer carrying member to a development zone facing the latent image carrying member.

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2. An image forming method according Claim 1, wherein the developer image is developed from the latent image by putting the thin layer of developer formed on the developer carrying member into contact with the latent image carrying  
20 member to develop an image from the latent image.

3. An image forming method according to Claim 1, wherein the developer image is developed from the latent image by generating an alternating electric field in the  
25 development zone to supply the thin layer of developer on the

developer carrying member to the latent image carrying member in a non-contact manner.

4. An image forming method according to Claim 1,  
5 wherein the developer conveyance member conveys the developer using electrostatic effect to supply the developer to the developer carrying member.

5. An image forming method according to Claim 1,  
10 wherein the developer is charged by a friction taking place between the developer conveyance member and the developer when the developer is conveyed by the developer conveyance member.

15 6. An image forming method according to Claim 5, wherein a protective layer made of a silicone-based resin is disposed on the surface of the developer conveyance member.

7. An image forming method according to Claim 4,  
20 wherein a relationship of  $|V_s| > |V_d|$  holds where  $V_d$  represents a surface movement velocity of the developer carrying member, and  $V_s$  represents a developer conveyance velocity of the developer moving on the developer conveyance member.

25 8. An image forming method according to Claim 1,

wherein an alternating field is generated between the developer carrying member and the developer conveyance member, both of which are arranged to be out of contact from each other.

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9. An image forming method according to Claim 1, wherein a powder pump supplies the developer to the developer conveyance member from a developer container.

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10. An image forming method according to Claim 1, wherein recovery means for recovering the developer on the developer carrying member is arranged downstream of the development zone and upstream of the developer supply zone along the surface movement direction of the developer

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carrying member.

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11. An image forming method according to Claim 1, wherein developer charge amount changing means for changing the amount of charge of the developer on the developer carrying member is arranged downstream of the development zone and upstream of the developer supply zone along the surface movement direction of the developer carrying member.

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12. An image forming method according to Claim 1, wherein an electrically conductive member for applying a

voltage to the developer on the developer carrying member is arranged downstream of the development zone and upstream of the developer supply zone along the surface movement direction of the developer carrying member.

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13. An image forming method according to Claim 1, wherein a toner having a spherical shape is used as the developer.

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14. An image forming method according to Claim 13, wherein the toner has a sphericity of 0.96 or larger.

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15. An image forming method according to Claim 1, wherein a relationship of  $P/\{(V_d/V_p)(V_s/V_d)\} < 20 \mu\text{m}$  holds and a surface movement of the developer carrying member is aligned in the same direction as a surface movement of the latent image carrying member in the development zone, where  $P$  represents a pitch of electrodes in the developer conveyance member,  $V_s$  represents a developer conveyance velocity of the developer moved by the developer conveyance member,  $V_d$  represents a surface movement velocity of the developer carrying member, and  $V_p$  represents a surface movement velocity of the latent image carrying member.

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16. An image forming apparatus for forming an image by

supplying a developer from a development unit to a latent image on a latent image carrying member for image development,

wherein the image forming apparatus forms the image using an image forming method according to one of Claims 1

5 through 15.

17. An image forming apparatus according to Claim 16, comprising a process cartridge having the development unit and the latent image carrying member integrated with the development unit in a unitary body, wherein the process cartridge is detachably mounted in the image forming apparatus.

18. A process cartridge integrating into a unitary body a latent image carrying member and at least a development unit for developing a developer image from a latent image on the latent image carrying member, wherein the process cartridge is detachably mounted in an image forming apparatus according to Claim 16.

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